Amendments to the Claims:

Claims 1-4 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (currently amended) A semiconductor device system configured for electrical connection to external circuitry, the semiconductor device system comprising:
a carrier substrate; and
a semiconductor device secured and operably coupled to the carrier substrate and including:
a semiconductor substrate having active circuit devices thereon; and
an on-chip capacitor including at least a portion thereof being formed in an active area of the semiconductor substrate underlying at least two bus signals of the active circuit devices, the on-chip capacitor being operably coupled between the active circuit devices and the carrier substrate to provide filtering capacitance for the semiconductor device.

2. (currently amended) A semiconductor device for operable connection to a carrier substrate, the semiconductor device comprising:
a semiconductor substrate;
active circuit devices on the semiconductor substrate; and
a capacitor having at least a portion thereof formed in an active area of the semiconductor substrate underlying at least two bus signals of the active circuit devices, the capacitor being operably coupled to the active circuit devices to provide filtering capacitance for the semiconductor device when the semiconductor device is operably connected to the carrier substrate.

3. (currently amended) A semiconductor die assembly configured for connection to external circuitry, the semiconductor die assembly comprising:

a carrier substrate configured for providing power and ground for at least one semiconductor die operably connected thereto; and

at least one semiconductor die operably connected to the carrier substrate and including:

a semiconductor substrate having active circuit elements formed on an active area thereof; and

at least one capacitor on the semiconductor substrate, at least a portion of the at least one capacitor being formed on the active area underlying at least two bus signals of the active circuit elements, the at least one capacitor being operably coupled to the active circuit elements to provide filtering capacitance for the at least one semiconductor die.

4. (currently amended) A semiconductor device for connection to a carrier substrate configured to provide power and ground thereto, the semiconductor device comprising:

a semiconductor substrate having active circuit elements formed on an active area thereof;

at least one capacitor on the semiconductor substrate, at least a portion of the at least one capacitor being formed on the active area underlying at least two bus signals of the active circuit elements, the at least one capacitor operably connected to the active circuit elements to provide filtering capacitance therefor when the semiconductor device is operably connected to power and ground of the carrier substrate.